

REMARKS

Claims 1-14 are all the claims pending in the application. Applicant acknowledges with appreciation the allowance of claims 9 and 14 and the indication of allowable subject matter in claims 3, 5, 8 and 10, but respectfully requests reconsideration of the application and allowance of all claims in view of the following remarks.

Claims 1, 2, 4, 6, 7 and 11-13 are rejected as anticipated by Hellberg.

In traversing this rejection in the response filed August 8, 2006, applicant pointed out that Hellberg does not teach the feature of claim 1 that, for each carrier frequency, the input sampling frequency corresponds to the modulation rate of the input signal. In paragraph 1(a) of the Office action, the examiner disagrees, pointing to lines 9-36 of column 2 of Hellberg and further stating that Hellberg teaches in-phase and quadrature frequency conversion on a per-channel basis, and the examiner further asserts that channels are carriers. However, accepting all of this as fact, that would mean that Hellberg teaches in-phase and quadrature frequency conversion on a per-carrier basis. This still does not make it inherent that for each carrier the input sampling frequency will correspond to the modulation rate. If there are assumptions here that the examiner is making, such assumptions might support an obviousness rejection, but not anticipation. And applicant cannot respond to the merits of those assumptions without the examiner first stating what they are. On the record so far, there is simply no anticipation or obviousness.

As to claim 7, applicant argued that Hellberg does not teach the feature whereby phase jumps are compensated by multiplication of the input samples by a complex which is of unitary modulus and of opposite phase to the phase jump to be compensated. The examiner now responds by pointing to Hellberg's use of the 2 or 4 modulus and multiplications and swapping

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real and imaginary parts of the signal. The examiner has not explained how this constitutes multiplication by unitary modulus and opposite phase. Indeed, one would think that the simple statement of 2 or 4 modulus would suffice to show that it is not unitary modulus.

In view of the above, allowance of all claims is respectfully requested.

Respectfully submitted,

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